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Title:
Perfect score:
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Maximum DB seq length: 1000000
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141.116 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

105: gb_gss15:*

SUMMARIES

a	Result
24	S E
574.8 46.5 511.2 41.4	sult Query No. Score Match Length DB ID
46.5 41.4	Query Match
602 623	Length
39	B
602 39 AA881502 623 39 AA849015	Ŋ
AA881502 vx19f05.r AA849015 EST191777	esult Query No. Score Match Length DB ID Description

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La co TR:035716 (
[1] ;, mRNA sequence.
AA881502
AA881502.1 GI-2001
EST.
Unpublished (1996)
On Sep 12, 1996 this sequence version replacement of the sequence version replacement washu-HHMI Mouse EST Project
Washu-HHMI Mouse EST project
Washington University School of MedicineP
                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia, Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 602)

Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuc Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. and Waterston, R.

The Washu-HMI Mouse EST Project
                                                                                                                                                                                                  AA881502 602 bp mRNA EST 26-MAR-1998 VX19f05.rl Soares 2NbMT Mus musculus cDNA clone IMAGE:1264929 similar to TR:035716 035716 SUPPRESSOR OF CYTOKINE SIGNALLING: [1] ;, mRNA sequence.
                                                                                                                                                 Mus musculus
                                                                                                                                                                                                                                                                                                                   mouse
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AA153269
AA153614
AA547459
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AA198584
AA710454
AA7110454
AA710456
AA768651
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AA768631
AA768333
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AW048541
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AA033363
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AI011829
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AA119130
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AA288982
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ATTO29171 UI-R-CO-1

ATA12316 mu43f12.r

ARA50220 EST192977

AA024269 mh99h07.r

AA119130 mp66e04.r

AA119130 mp66e01.x

AA119130 mp66e01.r

AA020019 mh48e11.r

AA1011829 EST206280

AW025552 wu97904.x

AA146233 mg68c10.r

AA082210 xxb61f03.x

AA1683421 tw51a09.x

AA1505924 vx69908.x

AA1505924 vx69908.x

AA150590 UI-R-EB1-9

AA437940 vv59c03.r

AA03336 UI-R-EB1-9

AA437942 vv32d07.r

AA150291 UI-R-G0-u

AA150291 Vv59c03.r

AA150291 UI-R-G0-u

AA1504 mg73503.r

AA150590 vx69908.s

AA19818 vx12605.s

AA19818 vx42605.s

AA789818 vv42605.x

AA196590 uc47f09.r
                                g1:1398104
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82 vb48e05.
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                                           GCACGGGGCGCACGAGCGGCTGCGTGCCGAGCCCGTGGGCACCTTCTTGGTGCGCGACAG
                                                                                     CATCACGCGGACCAGCGCGCCTCCTGGACGCCTGCGGCTTCTATTGGGGACCCCTGAGCGT
                                GCACGGGGCGCACGAGCGGCTGCGTGCCGAGCCCGTGGGCACCCTTCTTGGTGCGCGACAG
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Seq primer: -28ml3 rev2 ET from
High quality sequence stop: 459.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108 Tel: 314 286 1800 Fax: 314 286 1810 Email: mouseestewatson.wustl.edu
This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
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                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                    76
                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:1264929"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /sex="male"
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TITLE JOURNAL COMMENT

REFERENCE AUTHORS

ACCESSION VERSION KEYWORDS SOURCE ORGANISM

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The Institute for Genomic Research 9712, Medical Center Drive, Rockvll Tel: (301)-838-3529
Fax: (301)-838.0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; 1 (bases 1 to 623)
Lee,N.H., Glodek,A., Chandra,I., Mason,T.M., Quacker Kerlavage,A.R. and Adams,M.D.
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primer: M13-21.
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                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Rattus sp."
/db_xref="ATCC (inhost):2008043"
/db_xref="taxon:10118"
/clone="KLUAJ34"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      On Jan 17, 1998 this sequence version repl
Contact: Marra M/Mouse EST Project
WashIngton University School of Medicinep
4444 Forest Park Parkway, Box 8501, St. Lk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 538)

Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuc Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylle, T., Lennon, G., Soares, B., Wilson, R. and Theising, B., Wylle, T., Lennon, G., Soares, B., Wilson, R. and
                                                                                                                                                                                                                                                                                                                                                                                        Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus
                                                                                                                                                                                                                                                                                                                                                    Possible reversed clone:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The WashU-HHMI Mouse EST Project
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                                                                                                                                                                                                                                                                                                   sible reversed clone: similarity on wrong primer: -28m13 rev2 ET from Amersham h quality sequence stop: 512.
/note-"Organ: mammary gland; Vector: pT773D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; lst strand cDNA was primed with a Not I - oligo(dT) primer [5'
                                                                              /tissue_type="mammary gland"
/dev_stage="4 weeks"
/lab_host="DH10B"
                                                                                                                                                                                    /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:1365119"
                                                                                                                                            /sex="male"
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O35716 SUPPRESSOR OF CYTOKINE
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GGGGTCGGGGAGGGTCTCTGGCTTCATTTTTCTGCTGTGCAGAATATCCCTATTTTATATT 1165
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mus.

Eutheria; Rodentia; Sciurognathi; Muridae; Mus.

1 (bases 1 to 517)

Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubu
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                             vb48e05.rl Soares mouse lymph node NbMLN IMAGE:752192 5', mRNA sequence. AA288982 AA288982.1 GI:1936171
Unpublished (1996)
On Sep 12, 1996 this sequence
                          Waterston, R.
The WashU-HHMI Mouse EST Project
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gi:1404954
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                 86
                                                                                                                                                                                                                                                                                                                                                                  Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
WashIngton University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Loui
Tel: 314 286 1800
Fax: 314 286 1810
Email: mouseestewatson.wustl.edu
This clone is available royalty-free through
IMAGE Consortium (info@image.llnl.gov) for 1
                                  TCTCTGGCTTCATTTTTCTGCTGTGCAGAATATCCTATTTTATATTTTTTACAGCCAGTTT
                                                                                                        CCTACCTCTCCATGTTTACATATTCCCAGTATCTTTGCACAAACCAGGGGTCGGGGAGGG 1119
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                                                                                      CCTACCTCTCCATGTTTACATATTCCCAGTATCTTTGCACAAACCAGGGGTCGGGGAGGG
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                 TCTCTGGCTTCATTTTTCTGCTGTGCAGAATATCCTATTTTATATTTTTACAGCCAGTTT
                                                                                                                                                        -CCTCCGGGTCCCCCTGGTTGTAGCAGCTTGTGTCTCGGGGCCAGGACCTGAATTCCACT 159
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h quality sequence stop: 475.
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3']; double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not and Eco RI sites of the modified pT73 vector. RNA provided by Dr. Bertrand Jordan. Library constructed and normalized by Bento Soares and M.Fatima Bonaldo."

130 c 142 g 89 t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue_type="lymph node"
/dev_stage="4 weeks"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:752192"
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v) for further
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TITLE JOURNAL COMMENT

REFERENCE AUTHORS

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KEYWORDS VERSION ACCESSION DEFINITION RESULT 4 AA288982/c

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Query Match Best Local S Matches 521

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                                                                                                                                        Local
CAGCGCATCGTGGCCGCCGTGGGTCGCCGAGAACCTGGCGCGCATCCCTTTAACCCGGTA 453
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                                                                                                                                           Similarity
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This clone is available royalty-free through LLNL;
IMAGE Consortium (info@image.llnl.gov) for further:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tel: 314 286 1800
Fax: 314 286 1810
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Waterston, R.
The WashU-HHMI Mouse EST Project Unpublished (1996)
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Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus
Eukaryota; Metazoa;
Eutheria; Rodentia;
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                                                                                                                                                                                                                                                                                         156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ible reversed clone: similarity on wrong primer: -28ml3 rev2 ET from Amersham quality sequence stop: 432.
                                                                                                                                                                                                                                                                / Sex = male // Vissue_type="Thymus" // Vissue_type="Thymus // Vissue_type="Thymus" // Vissue_type="Thymus" // Vissue_type="Thymus" // Vissue_type="Thymus 
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/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:1345089"
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                                                                                                            Score 501; DB 40;
Pred. No. 2.2e-83;
0; Mismatches 0;
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                                                                                                                                                                Length 512;
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                                                                                                                                                                                                                                                                                                                        Unpublished (1996)
On Jan 19, 1998 this sequence version repl
Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Lo
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The WashU-HHMI Mouse EST Project
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1 (bases 1 to 512)

Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.,

Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,

Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,

Theising,B., Wylle,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                 Possible reversed clone: similarity on wardseq primer: -28ml3 rev2 ET from Amersham High quality sequence stop: 488.
                                                                                                                                                                                                            Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
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/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
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                                                                  AI029171
AI029171.1
EST.
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;
Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                             AI029171 548 bp mRNA EST UI-R-CO-iv-e-09-0-UI.S1 UI-R-CO Rattus norvegicus UI-R-CO-iv-e-09-0-UI 3', mRNA sequence.
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/clone_lib="Soares 2NbMT"
/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue_type="Thymus"
/dev_stage="4 weeks"
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                                                                                   GI:4296711
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AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                         BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                             Matches 522;
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                                                                                                                                                           677
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                                                                                                                                   CGGCCGCTGCAGGAGCTGTGTCGCCAGCGCATCGTGGCCGCCGTGGGTCGCGAGAACCTG 736
CGGCCGCTGCAGGAGCTGTCGCCAGCGCATCGTGGCCGCCGTGGGTCGCGAGAACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: msoares@blue.weeg.uiowa.edu
Oligo-dT track not found, Not I site shown in beginning of sequence
is likely internal to the message. CDNA Library Preparation: M.
Fatima Bonaldo, Ph.D. Clone distribution: clones will be available
through Research Genetics This clone is also available through the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Soares, MB
Program for Rat Gene Discovery and Mapping
University of Towa
451 Eckstein Medical Research Building Iowa City, IA 52242,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genome Res. 6 (9), 791-806 (1996)
97044477
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Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seq primer: M13 Forward POLYA=No.
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Fax: 319 335 9565
                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                                         /note="Wector: pT713D-Pac (pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; The UI-R-CO library is a subtracted library derived from the UI-R-Al and UI-R-EI libraries. The UI-R-Al library consisted of a mixture of individually tagged normalized libraries constructed from rat placenta, adult lung, brain, liver, kidney, heart, spleen, ovary, and muscle. The UI-R-EI library consisted of a mixture of individually tagged normalized libraries constructed from 8, 12 and 18-day embryo. The tag is a string of 3-5 nucleotides present between the Not I site and the oligo-dr track which allows identification of the library of origin of a clone within the mixture. The subtracted library (UI-R-CO) was constructed as follows: PCR amplified CDNA inserts from a pool of UI-R-Al and UI-R-EI clones from which 3' ESTs had been derived was used as a driver in a hybridization with the pooled UI-R-Al and UI-R-EI library in the form of single-stranded circles (subtracted library) was purified by hydroxyapatite column chromatography, converted to double-stranded circles and electroporated into DHOB bacteria (Life Technologies) to generate the UI-R-CO library. This procedure has been previously described (Bonaldo, Lennon and Soares, Genome Research 6: 791-806,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /strain="Sprague-Dawley"
/db_xref="taxon:10116"
/clone="UT-R-CO-1v-e-09-0-UI"
/clone_Ilb="UI-R-CO"
/dev_stage="adult"
/dev_stage="adult"
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/strain="sprague:Dawley"
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ACCESSION
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ORGANISM
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                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AA212316 555 bp mRNA EST 19-FEB-1997 mu43f12.rl Soares 2NDMT Mus musculus cDNA clone IMAGE:642191 5' similar to TR:G1041129 G1041129 SH2 DOMAIN CONTAINING GENE INDUCED BY MULTIPLE CYTOKINES, SIC. ;, mRNA sequence.
AA212316
                                                                                                                                             Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL;
IMAGE Consortium (info@image.llnl.gov) for further !
                                                                                                                                                                                                                             On May 18, 1995 this sequence version replaced Contact: Marra MyMouse EST project WashI-HMI Mouse EST Project WashIngton University School of MedicineP 4444 Forest Park Parkway, Box 8501, St. Louis, 24, 236, 1906.
                                                                                                                                                                                                                                                                                                                                                    Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque, Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and Waterston,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
1 (bases 1 to 555)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus
                                                                              Possible reversed clone: similarity Seq primer: -28ml3 rev2 ET from Ames High quality sequence stop: 419.
                                                                                                                                                                                                   Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                      Unpublished (1996)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          house mouse
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
                                                                    Cat:
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Amersham
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ACCESSION VERSION KEYWORDS SOURCE

EST

ORGANISM

Rattus sp.
Rattus sp.
Eukaryota;
Eutheria; R

Rodentia;

Chordata; Craniata; Vertebrata; Sciurognathi; Muridae; Murinae;

Mammalia; Rattus. RESULT AA850220

DEFINITION

AA850220 523 bp EST192987 Normalized ROVAE05 3' end, mRNA

mRNA sequence

rat ovary,

Bento

Soares Rattus sp.

08-JAN-1999

cDNA clone

ROVAE05 3' AA850220 AA850220.1

GI:4131808

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                                                      GAACTGCTTCTTCGCGCTCAGCGTGAAGATGGCTTCGGGCCCCACGAGCATCCGCGTGCA 549
CTTTCATGCCGGGCGCTTTCACTTGGACGGCAGC
                                                                                                                                   GACCAGCGCGCTCCTGGACGCCTGCGGCTTCTATTGGGGGACCCCTGAGCGTGCACGGGGC
                                                                                                                                               GACCAGCGCGCTCCTGGACGCCTGCGGCTTCTATTGGGGACCCCTGAGCGTGCACGGGGC
                                                                                                                                                                                           CCCTGGCGACACTCACTTCCGCACCTTCCGCTCCCACTCCGATTACCGGCGCATCACGCG
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                     CTTCCAGGCCGGCCGCTTCCACTTGGACGGCAGC 583
                                           GAACTGCTTCTTCGCGCTCAGCCTGAAGATGGCTTTGGGGGCCCAGGAGCATCCGCGTGCA
                                                                                        GCACGAGCGGCTGCGTGCCGAGCCCGTGGGCACCTTCTTGGTGCGCGACAGTCGCCAACG
                                                                                                             GCACGAGCGGCTGCCGAGCCCGTGGGCACCTTCTTGGTGCGCGACAGTCGTCAACG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /tissue_type="Thymus"
/dev_stage="4 weeks"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="IMAGE:642191"
/clone_11b="Soares 2N
/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                 36.8%;
92.8%;
                                                                                                                                                                                                                                                                                                                                                                                                        Score 454.8; DB 30;
Pred. No. 7.8e-75;
0; Mismatches 37;
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                                                                                 TITITACAGCCAGTITAGGTAATAAACTITATIATGAAAGITITITITIT 1212
                                                                                                                                      CAGGGGTCGGGGAGGGTCTCTGGCTTCATTTTTCTGCTGTGCAGAATATCCTATTTTATA 1163
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                                                                                                                                                                                                                                               GGGTGAGATGCCTCCCACTTCTGGCTGGAGACCTTATCCCGCCTCTC-----GGGGGGGC 294
                                                                                                                                                                                                                                                                                                  GGGTGAGATGCCTCCCACTTCTGGCTGGAGACCTCATCCCACCTCTCAGGGGTGGGGGTG 983
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                                                                                                                                                                                GGACCTGAACTCCACGCCTACCTCCCATGTTTACATGTTCCCCAGTATCTTTGCACAAAC
                                                                                                                                                                                                                                   CTCCCCTCCTGGTGCTCCCGGT-CCCCCTGGTTGTAGCAGCTTGTGTGTGGGGCCA 353
                                                                                                                                                                                                                                                                                                                                                                      Tel: (301)-638-3529
Fax: (301)-838-0208
Email: nhlee@tigr.org
Seq primer: M13-21.
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On Jul 19, 1995 this sequence version replaced gi:2937760.
Other_ESTs: EST192988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 523)
Lee, N.H., Glodek, A., Chandra, I., Mason, T.M., Quackenbush, J.,
Kerlavage, A.R. and Adams, M.D.
Rat Genome Project: Generation of a Rat EST (REST) Catalog &
  AA024269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The Institute for Genomic Research 9712, Medical Center Drive, Rockville, MD 20850, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Lee, NH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone_lib="Normalized rat ovary, Bento Soares"
/note="Organ: ovary; Vector: pT/T3Pac; Site_1: l
Site_2: NotI"
147 c 132 g 156 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Rattus sp."
/db_xref="ATCC (inhost):2008691"
/db_xref="taxon:10118"
/clone="ROVAE05"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ocation/Qualifiers
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Pred. No. 7.8e-74;
0; Mismatches 21;
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282
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                                                                                                                                                                                                      759 TACTCCGTGACTACCTGAGTTCCTTCCCCTTCCAGATCTGACCGGCTGCCGCTGTGCCGC 818
                                                                                                                                                                                                                                               Local Similarity
CACGTGGGAGCCCTCCCCCCCTGGGTCGGAGGGAGTGGTTGTGGAGGGTGAGATGCCTCC
                                                                        CACGTGGGAGCCCTCCCCCCCCTGGGTCGGAGGGAGTGGTTGTGGAGGGTGAGATGCCTCC
                                                                                                               449;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mh99h07.rl Soares mouse placenta 4NbMPl3.5 14.5 Mus musculus cDNA
clone IMAGE:459133 5', mRNA sequence.
AA024269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WashU-HHMI Mouse EST Project
WashIngton University School of MedicineP
4444 Porest Park Parkway, Box 8501, St. Lx
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T., Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Marra M/Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (1996)
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                                                                                                                                                                                                                                                                                                                      149
                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                   /note="Organ: placenta; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco 1st strand cDNA was primed with a Not I - oligo(dT) pri [5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone_lib="Soares mouse
/sex="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:459133"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="placenta"
                                                                                                                                                                                                                                               35.8%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chordata; Craniata; Vertebrata; Mammalia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                              Score 441.8; DB Pred. No. 2e-72; 0; Mismatches 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AI400249 591 bp mRNA EST 30-MAR-1999 tg68d01.xl Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:2113921 3' similar to TR:015097 015097 JAB, PARTIAL CDS ;contains MER22.b2 MSR1 repetitive element ;, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This clone is available royalty-free through LINL; IMAGE Consortium (info@image.llnl.gov) for further Insert Length: 816 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (1997)
On Mar 20, 1998 this sequence version
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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EST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tel: (301) 496-1550
                     Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  primer: -40UP from Gibco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              quality sequence stop: 465.
Location/Qualifiers
 Conservative
                                                                                                              87
                                                                                                       /note="Organ: mixed (see below); Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (melanocyte 2NbHM, pregnant uterus NbHPU, and fetal heart NbHH19W) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 260232-265223, 340488-345479, and 484488-489479."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gene Index
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Robert_Strausberg@nih.gov
                                                                                                                                                                                                                                                                                                                                                  /clone_lib="Soares_NhHMPu_S1"
/tissue_type="Pooled human me.pregnant uterus"
                                                                                                                                                                                                                                                                                                                                                                                                       /clone="IMAGE:2113921"
                                                                                                                                                                                                                                                                                                                                                                                                                          /db_xref="taxon
                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                'lab_host="DH10B"
                   34.1%;
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                   Score 421.4; DB 46; Pred. No. 1.2e-68;
 Mismatches
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RESULT 12
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MGI:348854
Seg primer
                                                                                                  on Sep 12, 1996 this sequence version repl
Contact: Marra W.Mouse EST project
WashU-HMMI Mouse EST project
Washington University School of Medicinep
4444 Forest Park Parkway, Box 8501, St. Ld
                          Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                        Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 449)

Marra,M., Hiller,L., Allen,M., Bowles,M., Dietrich,N., Dubuque, Marra,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                    mp66e04.rl Soares
                                                                         Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                               Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                 Mus musculus
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AA119130
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Mus musculus cDNA clone IMAGE:574206
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Best Local Similarity
Matches 445; Conserv
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                         AW047382 422 bp mRNA EST 18-SEP-1999 UI-M-BH1-ame-e-06-0-UI.51 NIH_BMAP_M_S2 Mus musculus cDNA clone UI-M-BH1-ame-e-06-0-UI 3', mRNA sequence.
AW047382.1 GI:5907911 EST.
             house mouse.
  musculus
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Location/Qualifiers
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/clone="IMAGE:574206"
/clone_lib="Soares 2NbMT"
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/tissue_type="Thymus"
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/strain="C57BL/6J"
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98.9%;
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Pred. No. 1.3e-68;
0; Mismatches 3
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                       TGCGTGCCGAGCCCGTGGGCACACTTCTTGGTGCGCGACAGTCGTCAACGGAACTGCTTCT
                                                                                                                          TCCTGGACGCCTGCGGCTTCTATTGGGGACCCCTGAGCGTGCACGGGGCGCACGAGCGGC
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TGCGTGCCGAGCCCGTGGGCACCTTCTTGGTGCGCGACAGTCGCCAACGGAACTGCTTCT
                                                                                                TCCTGGACGCCTGCGGCTTCTATTGGGGACCCCTGAGCGTGCACGGGGGCGCACGAGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                      421;
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Fax: 301 443 9890
Emmail: mEST@nmail.nih.gov
Oligo-dT track not found, Not I site shown in beginning of sequence
Oligo-dT track not found, Not I site shown in beginning of sequence
is likely internal to the message. cDNA Library Preparation: M.B.
Soares Lab Clone distribution: NIH BMAP cDNA clones will be made
available by the means that is soon to be determined. When NIH
determines the means for distribution of the BMAP cDNA clones, this
record will be updated accordingly when that means is determined.
Seq primer: M13 Forward
POLYA-NO.
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Contact: Chin, H
National Institute of Mental Health
6001 Executive Blvd. Room 7N-7190, MSC
20892-9643, USA
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Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
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/note="Vector: pT773D-Pac (Pharmacia) with a modified
polylinker; Site_1: Not I; Site_2: Eco RI; The
polylinker; Site_1: Not I; Site_2: Eco RI; The
NIH_BMAP_M_S2 library is a subtracted library derived from
NIH_BMAP_M_S1, which in turn is a subtracted library
derived from a mixture of normalized libraries from ten
regions of the mouse brain (cerebellum, brain stems,
olfactory bulbs, hypothalamus, cortex, amygdala, basal
ganglia, pineal gland, striatum, hipoccampus). The driver
used for subtraction consisted of a pool of 5,000 clones
from the NIH_BMAP_M_S1 library and a pool of 2,000 clones
obtained from non-normalized and normalized mouse brain
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TAG_TISSUE-corpus-striatum
TAG_SEQ-ACGGC"
TAG_SEQ-ACGGC 50 t
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/clone_lib="NIH_BMAP_M_S2"
/dev_stage="27-32 days"
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/db_xref="taxon:10090"
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TCGCGCTCAGCGTGAAGATGGCTTCGGGCCCCACGAGCATCCGCGTGCACTTCCAGGCCG

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WashU-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia. Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 493)

Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuc Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylle,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA020019 493 bp mRNA EST 21-JAN-1997 mh48c11.r1 Soares mouse placenta 4NbMP13.5 14.5 Mus musculus clone IMAGE:445748 5', mRNA sequence.
AA020019 AA020019 GI:1483801 EST.
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Contact: Marra M/Mouse EST Project
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The WashU-HHMI Mouse EST Project
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                    65
               T 3']; double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization, and was constructed by Bento Soares and M.Fatima Bonaldo."

204 c 144 g 80 t
                                                                                                                                                                         /note="Organ: placenta; Vector: pT7T3D-Pac (Pharmacia)
with a modified polylinker; Site_1: Not I; Site_2: Eco RI;
lst strand cDNA was primed with a Not I - oligo(dT) primer
[5'
                                                                                                                                                                                                                                                    /tissue_type="placenta"
/dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:445748"
                                                                                                                                                                                                                                                                                                                          /sex="unknown"
                                                                                                                                                                                                                                                                                                                                               clone_lib="Soares mouse placenta 4NbMP13.5 14.5"
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                                                                                                                                                                                        Unpublished (1996)
On Sep 12, 1996 this sequence version replect contact: Marra M/Mouse EST Project WashU-HHMI Mouse EST Project WashIngton University School of Medicinep 4444 Forest Park Parkway, Box 8501, St. Identification of the second St. 14, 214, 225 126.
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1 (bases 1 to 436)

Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T., Gelsel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and Waterston,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA116407 436 bp mRNA EST 17-FEB-1997 mp99a12.rl Soares 2NbMT Mus musculus cDNA clone IMAGE:577342: similar to TR:G1041129 G10441129 SH2 DOMAIN CONTAINING GENE IN BY MULTIPLE CYTOKINES, SIC. ;, mRNA sequence.
                  Possible reversed clone: similarity on Seq primer: -28M13 rev2 from Amersham High quality sequence stop: 372.
                                                                                           Email: mouseest@watson.wustl.edu
This clone is available royalty-free
IMAGE Consortium (info@image.llnl.gov
                                                                                                                                                        Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                  The WashU-HHMI Mouse EST Project
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Search completed: February Job time: 94451 sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 33.3%; Score 410.8; DB 28; Length 436; Best Local Similarity 99.1%; Pred. No. 1.1e-66; Matches 434; Conservative 0; Mismatches 2; Indels 2; Gaps
                                                                      308 GCCCCTGGCGACACTCACTTCCGCACCTTCCGCTCCCACTCCGATTACCGGCGCATCACG 367
                                                                                                                                                                                                                                                                                                    359
                                                                                                                                            368 CGGACCAGCGCGCTCCTGGACGCCTGCGGCTTCTATTGGGGACCCCTGAGCGTGCACGGG 427
                                                                                                                                                                                       299
                                                                                                                                                                                                                                                              248 TCTTCGTCCTCGCCAGCGGCCCCCGTGCGTCCCCGGCCCTGCCCGGCGGGTCCCAGCCCCA 307
                                                                                                                                                                                                                                                                                                                                                             121 TGGCCCACCCCTCCAGCTGGCCCCTCGAGTAGGATGGTAGCACGCAACCAGGTGGCAGCC 180
                                                                                                                                                                                                                                                                                                                                                                                 128 TGGCCCACCCCTCCAGCTGGCCCCTCGAGTAGGATGGTAGCACGCAACCAGGTGGCAGCC 187
                                                                                                                                                                                                                                               241 TCTTCGTCCTCGCCAGCGG-CCCCGTGCGTCCCCGGCCCTG-CCGGCGGTCCCAGCCCCA 298
                                                                                                                                                                                                                                                                                                                                                                                                                    GCCCCTGGCGACACTCACTTCCGCACCTTCCGCTCCCACTCCGATTACCGGCGCATCACG 358
                                                                                                                              CGGACCAGCGCGTCCTGGACGCCTGCGGCTTCTATTGGGGACCCCTGAGCGTGCACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:577342"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="Thymus"
/dev_stage="4 weeks"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              clone_lib="Soares 2NbMT"
               4, 2000, 16:33:12
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